

Chapter 7

CONSTRUCTION IMPROVEMENTS AND COST ESTIMATES

The priorities placed on construction projects will vary depending on what criteria are considered and what weight is attached to the various criteria. A majority of the time, improvements to the major thoroughfare system and major traffic routes are more important than minor thoroughfares with the lower traffic volumes. To be placed into the NC TIP, a project must show favorable benefits relative to costs and should not be prohibitively disruptive to the environment.

The following measures were used to estimate the benefits that would be derived from each project: road user cost savings, the potential for increased economic development resulting from the improvement, and the positive and negative environmental impacts. The first measure is an estimate of actual dollar savings, while the others are estimates of the probability of the resulting change. These measures are described below.

Road user benefits should result from any roadway improvement (i.e., road widenings, new road construction). These benefits are achieved through reductions in transportation costs: vehicle operating, travel time, and accident costs. The total dollar savings over the design period (20-25 years) determines the benefits using such data as project length, base and design year traffic volumes, traffic speed, type of facility, and volume/capacity ratio.

The economic development impact of a project is shown as the probability to stimulate development in an area by reducing transportation costs and providing access to productive land. It is a subjective estimate based on the knowledge of the proposed project, local development characteristics, and land growth potential. The probability rates the impact based on a scale from 0 (no impact) to 1.00 (excellent impact):

<u>Subjective Evaluation</u>	<u>Success or Impact Probability</u>
Excellent, highest	1.00
Very good, very substantial	0.75
Good, substantial, considerable	0.50
Fair, some	0.25
Poor, none	0.00